

Issued by Notified Body No. 0402 according to Directive 2014/32/EU MID annex II Module B, regarding:

## Electronic gravimetric filling instrument “Autopac”, “Bigpac”, “Fallpac”, “Manpac”, “Optipac”, “Skruvpac”

Issued to

**VEBE Teknik AB**

SE-574 95 Björköby, Sweden

**In accordance with**

Annex II Module B of the Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments, implemented in Swedish law by SWEDAC Regulation STAFS 2016:1 and STAFS 2016:7, The Regulations and Guidelines concerning Automatic Weighing Instruments. RISE Certification Rule SPCR 302 has been applied.

**Type of instrument**

An electronic automatic gravimetric filling instrument – a family of electronic automatic gravimetric filling instruments.

**Type designation**

Autopac, Bigpac, Fallpac, Manpac, Optipac, Skruvpac

**Conclusion of the examination**

For the instruments mentioned in this Certificate, the following essential requirements of Directive 2014/32/EU apply:

- Annex I, Essential requirements
- Annex VIII, (MI-006), Automatic weighing instruments

For the instruments, the following harmonized standards or normative documents will be applied:

- OIML R61, edition 2004, Automatic gravimetric filling Instruments

For the instruments, the following technical specifications will be applied additionally:

- WELMEC 2.6, Guide for the testing of automatic catchweighing instruments (Issue 3)

The measuring instrument's technical design which is described below complies with the above-mentioned essential requirements. With this Certificate, permission is given to attach the number of this Certificate to the instruments that have been manufactured in compliance with this Certificate.

**Rated operating conditions**

Measurand:	Weight of bags	Electromagnetic environment class:	E2
Measurement range:	2,7 - 1 400 kg		
Accuracy class:	Ref (0,5),(1), (2)	Climatic environment:	-10 to +40 °C (non-condensing)

Originally issued: 2008-03-28  
Valid until: 2028-03-05

This certificate replaces earlier issues.



Martin Tillander  
Director Product Certification

Certificate 0402-MID-489801 | issue 7 | 2022-09-14

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**The instruments must meet the following provisions:**

**1. Design of the instrument**

**1.1 General description**

**Product names**

Autopac”, “Bigpac”, “Fallpac”, “Manpac”, “Optipac”, “Skruvpac”

**Measuring system description**

The weighing instrument is an automatic gravimetric filling instrument, a subtractive weigher, which produce predetermined mass of individual fills, including big-bags. An electronic unit is connected to load cells supporting a weighing hopper, sack clamp, filling aggregate or a platform, with or without lever system. The bag is filled by means of a screw feeder, vibrator-chute or other suitable construction. The filling is performed in one or several rough discharges and one or several fine discharges. The instrument must be permanently mounted in level position.

**1.2 Measurand sensor**

The weighing hopper is supported from three load cells, platform scales are supported from four load cells, lever system are supported from one load cell.

**Load cell**

Type	Z6	HLC
Test certificate No.	TC2207 (rev. 4)	TC 6524 (rev. 2)
Manufacturer	HBM	

**1.3 Measurement value processing**

**Hardware**

An electronic unit is connected to load cells supporting a weighing hopper, sack clamp, filling aggregate or a platform, with or without lever system. The bag is filled by means of a screw feeder, vibrator-chute, or other suitable construction. The filling is performed in one or several rough discharges and one or several fine discharges. The instrument must be permanently mounted in level position.

**Software**

The validation of software was based on the essential requirements given in MID and WELMEC Guide 7.2.

**SIWAREX FTA**

Start the program “SIWATOOL FTA” and select data record DR9 (Application-ID) and the tab “Info on module” to check that an authorized software is loaded into the instrument. The software cannot be changed after securing. Then select data record DR3 (Adjustment parameter) and the tab “Calibration param. 3” to verify that the regulations field is set to “OIML”.

**SIWAREX WP351 HF**

Connect to the webserver and select data record DR09 (Read out module information) to check that an authorized software is loaded into the instrument. The software cannot be changed after securing. Then select data record DR03 (Calibration parameters) and verify that the Restriction code is set to 1 (OIML regulations)

**1.4 Indication of the measurement results**

The terminal displays the gross/net weight of the material and filling status and controls the feeding device. The indication may also be of multi-interval- or multiple range type. The indicator is outlined as a module of the programmable logic circuit (PLC) SIMATIC S7 and is composed of the analogue digital

processing unit which is integrated into the PLC, and a display unit. Several strain gauge load cells may be connected. The SIWAREX unit performs the A/D conversion and forms the weight value. Manufacturer is Siemens AG.

SIWAREX FTA can connect to SIMATIC HMI or Siebert S11 or Siebert S102.  
SIWAREX WP351 HF can connect to SIMATIC HMI or a webserver.

SIMATIC HMI is a terminal with either a touch screen monitor or with separate function keys.

### 1.5 Optional equipment and functions subject to MID requirements

- preset tare
- automatic fill correction
- big-bag function
- For protection against stroke of lightning and surge a device designated BXT ML4 BE12 may be used. Manufacturer is Dehn & Söhne
- An optional data storage device may be used. The equipment consists of an insertable multi-media-card and each data set has an identification code and is protected by a checksum. The communication is done via the serial interface

### 1.6 Technical documentation

The operating manual includes technical specifications and for example how to get access to the checksum. Dynamic settings is protected by a hardware switch.

### 1.7 Integrated equipment and functions not subject to MID

See operating manual.

## 2. Technical data

### 2.1 Rated operating conditions

#### Measurand

Any material within the measuring range, weight expressed in kg.

#### Measurement range

Type	Capacity	Scale interval, d	No. loadcells	Gross/Net
Autopac	2,7 - 51 kg	10 - 20 g	3	Gross
Optipac	2,7 - 51 kg	10 - 20 g	3	Gross
Skruppac	2,7 - 51 kg	10 - 20 g	1	Gross
Manpac	2,7 - 51 kg	10 - 20 g	1	Gross
Fallpac	2,7 - 51 kg	10 - 20 g	1	Gross
Bigpac	400 - 1400 kg	0,5 kg	4	Gross
Nettovåg	2,7 - 51 kg	10 - 20 g	3	Net

Maximum rate of operation ≤ 1 000 fills per hour

Number of loads per fill 1

Power supply 24 DC

Maximum length of the load cell cable from the junction box to the evaluation unit is 500 meters. (6-wire, ≥ 0,75 mm<sup>2</sup>).

#### Durability period under rated operating conditions estimated by the manufacturer

Durability period estimated to be 12 months.

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**2.2 Other operating conditions**

Not applicable.

**3. Interfaces and compatibility conditions**

The instrument may use the following protective interfaces for data communication:

<i>FTA</i>	<i>WP 351 HF</i>
<ul style="list-style-type: none"> <li>- front plug with 40 screws fixed contacts for load cells, digital I/O, analog I/O</li> <li>- RS422 for remote display (Siebert S11 or S102)</li> <li>- RS232, 9 pins D-sub plug for connection of printer or PC</li> <li>- Current loop, 20 mA</li> <li>- PLC-bus</li> <li>- Multi-media card</li> </ul>	<ul style="list-style-type: none"> <li>- Load cell connection with 10 V DC supply voltage; 0.5 <math>\mu</math>V/e; 3x6000 d <math>\pm</math>20,000,000 digit resolution at 1 kHz sampling rate</li> <li>- Digital input signals DI.0, DI.1 and DI.2 24 V DC</li> <li>- Digital output signals DQ.0, DQ.1 and DQ.2 24 V DC</li> <li>- Counter input CI; up to 9 kHz; 24 V DC</li> <li>- Serial interface RS485</li> <li>- Ethernet interface (RJ45 socket)</li> </ul>

**4. Requirements on production, putting into use and utilization**

**4.1 Requirements on production**

No special requirements identified.

**4.2 Requirements on putting into use**

Verification at the place of use is required.

**4.3 Requirements for consistent utilizations**

No special requirements identified.

**5. Control of the measuring tasks of the instrument in use**

No special measuring tasks are identified.

## 6. Security measures

### 6.1 Sealing

#### SIWAREX FTA

##### Interfaces

No sealing of interfaces is necessary

##### Indicator

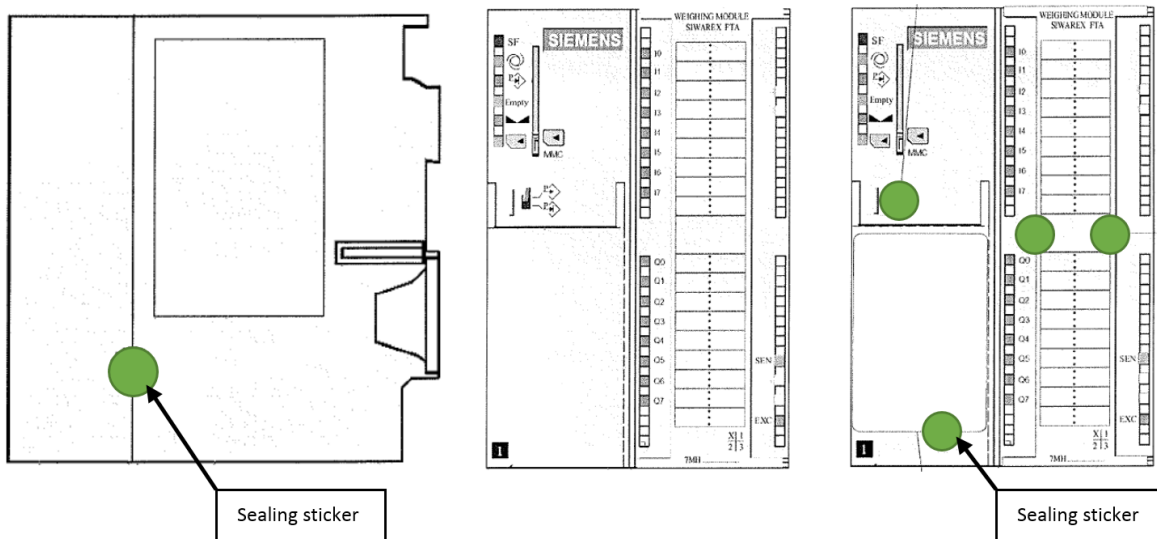
The indicator shall be sealed with stickers on the edge of the front panel and one on the edge of bottom panel. The verification switch on the front covers shall be sealed.

##### Load cells

The cable connections should be sealed with sealing stickers or wire.

##### Descriptive plate

The descriptive plate (plates) shall be secured with sealing stickers unless the plate cannot be removed without being destroyed.



**SIWAREX WP351 HF**

1. Remove the electronic weighing system of the BaseUnit.

2. Push the write protection switch (1) on the rear of the electronic weighing system to ON. The electronic weighing system is protected against changes to parameters for operation requiring official calibration. Parameters that are not write protected can still be changed.

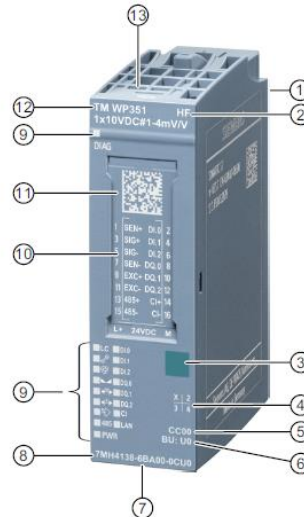
3. Place the electronic weighing system on the BaseUnit.

4. Hold the unlock protection in such a way that the recesses for the three fastening screws face upwards.

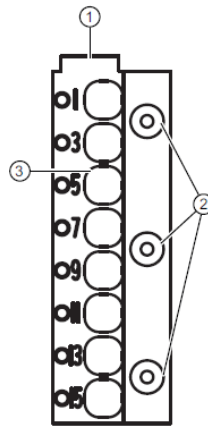
5. Guide the connecting cables from the top through the cable glands of the unlock protection.

6. Place the unlock protection on the BaseUnit in such a way that the top end of the unlock protection is placed in the housing of the electronic weighing system.

7. Secure the unlock protection with three fastening screws. The electronic weighing system can no longer be removed from the BaseUnit. The connecting cables of the electronic weighing system, load cells or terminal boxes can no longer be removed.



- ① Rear: Write protection switch
- ② Function class
- ③ Color coding electronic weighing system type
- ④ Function version
- ⑤ Color code for selection of the color-coded labels
- ⑥ BaseUnit type
- ⑦ Below: Ethernet
- ⑧ Article number
- ⑨ LEDs (Page 145)
- ⑩ Wiring diagram
- ⑪ 2D matrix code
- ⑫ Electronic weighing system type and designation
- ⑬ Button in enclosure for emergency access to the Web server



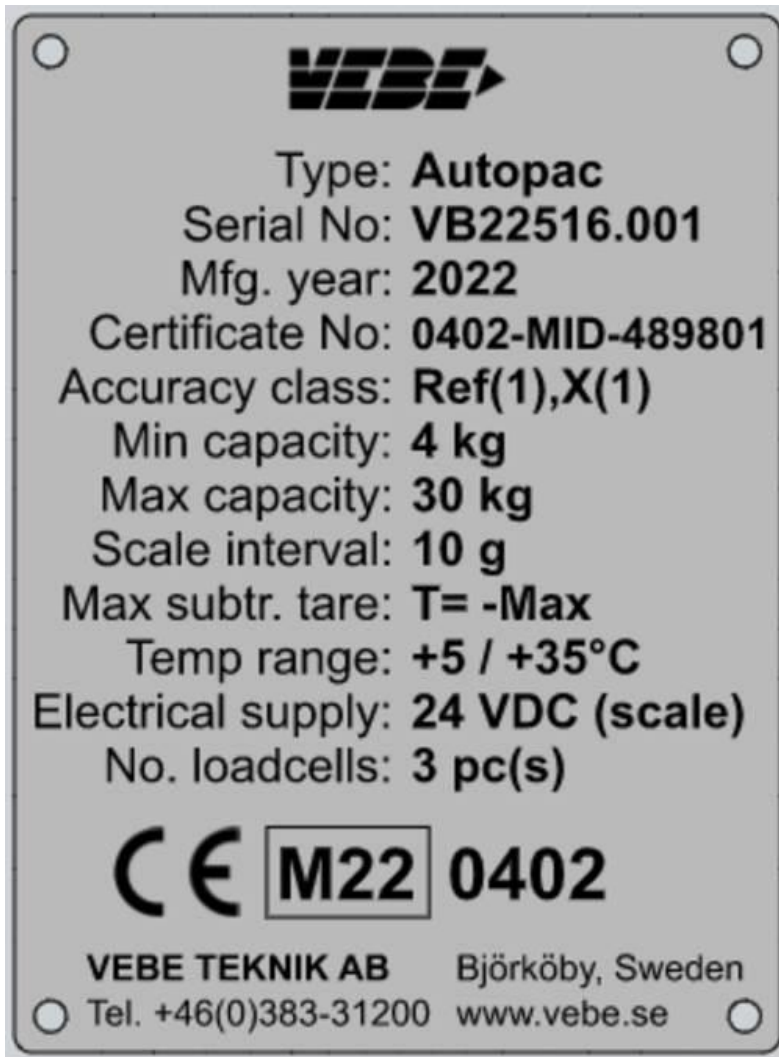
- ① Top end for inserting in the electronic weighing system
- ② Recesses for the fastening screws
- ③ Cable routing

**6.2 Data logger.**

The weighing results subject to legal control is considered as being documented by the fillings contained in separate batches designated by the fill weight

## 7. Labelling and inscriptions

### 7.1 Information to be borne by the instrument



*Descriptive plate, example*

### 7.2 Conformity marking in accordance with MID article 21

The instrument shall be marked in accordance with MID article 21 which e.g. describes the CE-marking together with M, year of marking and the id number of the notified body responsible for module D or F.

## 8. Testing and examination

All the plans, schematic diagrams and documentations are recorded under reference files 8P00274 and 1105019.